

§ 587.3

the protective performance of a motor vehicle or item of motor vehicle equipment with respect to human occupants

§ 587.3 Application.

This part does not in itself impose duties or liabilities on any person. It is a description of tools that are used in compliance tests to measure the performance of occupant protection systems required by the safety standards that refer to these tools. It is designed to be referenced by, and become part of, the test procedures specified in motor vehicle safety standards such as Standard No. 208, *Occupant Crash Protection*, and Standard No. 214, *Side Impact Protection*.

[65 FR 17199, Mar. 31, 2000]

Subpart B—Side Impact Moving Deformable Barrier

§ 587.4 Definitions.

All terms defined in section 102 of the National Traffic and Motor Vehicle Safety Act (15 U.S.C. 1391) are used in their statutory meaning.

§ 587.5 Incorporated materials.

(a) The drawings and specifications referred to in this regulation that are not set forth in full are hereby incorporated in this part by reference. These materials are thereby made part of this regulation. The Director of the Federal Register has approved the materials incorporated by reference. For materials subject to change, only the specific version approved by the Director of the Federal Register and specified in the regulation are incorporated. A notice of any change will be published in the FEDERAL REGISTER. As a convenience to the reader, the materials incorporated by reference are listed in the Finding Aid Table found at the end of this volume of the Code of Federal Regulations.

(b) The drawings and specifications incorporated in this part by reference are available for examination in the general reference section of Docket 79-04, Docket Section, National Highway Traffic Safety Administration, Room 5109, 400 Seventh Street, SW., Washington, DC 20590. Copies may be obtained from Rowley-Scher

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Reprographics, Inc., 1111 14th Street, NW., Washington, DC 20005, telephone (202) 628-6667 or (202) 408-8789. The drawings and specifications are also on file in the reference library of the Office of the Federal Register, National Archives and Records Administration, Washington, DC.

§ 587.6 General description.

(a) The moving deformable barrier consists of component parts and component assemblies which are described in drawings and specifications that are set forth in this § 587.6 of this chapter (incorporated by reference; see § 587.5).

(b) The moving deformable barrier specifications are provided in the drawings shown in DSL-1278 through DSL-1287, except DSL-1282, and the drawing shown in DSL-1290 (DSL-1278 through DSL-1287, except for DSL-1282, and DSL-1290 are incorporated by reference; see § 587.5).

(1) The specifications for the final assembly of the moving deformable barrier are provided in the drawings shown in DSL-1278, dated June 2002.

(2) The specifications for the frame assembly of the moving deformable barrier are provided in the drawings shown in DSL-1281, dated August 20, 1980.

(3) The specifications for the face of the moving deformable barrier are provided in the drawings shown in DSL-1285, dated October 1991, and DSL-1286, dated August 20, 1980.

(4) The specifications for the ballast installation and details concerning the ballast plate are provided in drawings shown in DSL-1279 and DSL-1280, both dated August 20, 1980.

(5) The specifications for the hub assembly and details concerning the brake are provided in drawings shown in DSL-1283, dated October 1991.

(6) The specifications for the rear guide assembly are provided in drawings shown in DSL-1284, dated August 20, 1980.

(7) The specifications for the research axle assembly are provided in drawings shown in DSL-1287, dated October 1991.

(8) The specifications for the compliance axle assembly are provided in drawings shown in DSL-1290, dated October 1991.

(c) In configuration 2 (with two cameras and camera mounts, a light trap vane, and ballast reduced), the moving deformable barrier (crabbable axle), including the impact surface, supporting structure, and carriage, weighs 3,015 pounds, has a track width of 74 inches, and has a wheelbase of 102 inches.

(d) In configuration 2, the moving deformable barrier has the following center of gravity:

X=44.2 inches rear of front axle

Y=0.3 inches left of longitudinal center line

Z=19.7 inches from ground.

(e) The moving deformable barrier has the following moment of inertia:

Pitch=1669 ft-lb-sec²

Roll=375 ft-lb-sec²

Yaw=1897 ft-lb-sec²

[55 FR 45779, Oct. 30, 1990; 56 FR 47011, Sept. 17, 1991, as amended at 57 FR 7558, Mar. 3, 1992; 68 FR 44472, July 29, 2003]

§§ 587.7–587.10 [Reserved]

Subpart C—Offset Deformable Barrier

SOURCE: 65 FR 17199, Mar. 31, 2000, unless otherwise noted.

§ 587.11 [Reserved]

§ 587.12 Incorporation by reference.

Society of Automotive Engineers (SAE) Recommended Practice J211/1 Rev. MAR 95, Instrumentation for Impact Tests-Part 1—Electronic Instrumentation, is incorporated by reference in § 587.15 in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. A copy may be obtained from SAE at Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096. A copy of the material may be inspected at NHTSA's Docket Section, 400 Seventh Street, S.W., room 5109, Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

§ 587.13 General description.

The offset deformable barrier is comprised of two elements: a fixed rigid barrier and a deformable face (Figure 1). The fixed rigid barrier is adequate to not deflect or displace more than 10 mm during the vehicle impact. The deformable face consists of aluminum honeycomb and aluminum covering.

§ 587.14 Deformable face component dimensions and material specifications.

The dimensions of the deformable face are illustrated in Figure 1 of this subpart. The dimensions and materials of the individual components are listed separately below. All dimensions allow a tolerance of ± 2.5 mm (0.1 in) unless otherwise specified.

(a) Main honeycomb block.

(1) *Dimensions.* The main honeycomb block has a height of 650 mm (25.6 in) (in the direction of honeycomb ribbon axis), a width of 1,000 mm (39.4 in), and a depth of 450 mm (17.7 in) (in the direction of honeycomb cell axis).

(2) *Material.* The main honeycomb block is constructed of the following material. The honeycomb is manufactured out of aluminum 3003, with a foil thickness of 0.076 mm (0.003 in) ± 0.004 mm (0.002 in) a cell size of 19.14 mm (0.75 in), a density of 28.6 kg/m³ (1.78 lb/ft³) ± 2 kg/m³ (0.25 lb/ft³), and a crush strength of 0.342 MPa (49.6 psi) + 0%–10%, measured in accordance with the certification procedure described in § 587.15.

(b) Bumper element honeycomb.

(1) *Dimensions.* The bumper element honeycomb has a height of 330 mm (13 in) (in the direction of honeycomb ribbon axis), a width of 1,000 mm (39.4 in), and a depth of 90 mm (3.5 in) (in the direction of honeycomb cell axis).

(2) *Material.* The bumper element honeycomb is constructed of the following material. The honeycomb is manufactured out of aluminum 3003, with a foil thickness of 0.076 mm (0.003 in) ± 0.004 mm (0.002 in), a cell size of 6.4 mm (0.25 in) ± 1 mm (0.040 in), a density of 82.6 kg/m³ (5.15 lb/ft³) ± 3 kg/m³ (0.19 lb/ft³), and a crush strength of 1.711 MPa (248 psi) + 0%–10%, measured in accordance with the certification procedure described in § 587.14.

(c) Backing sheet.